



PATENT
Attorney Docket No. A-68271-2/RMS/SMK/SPL
Attorney File No.: 463037-00204

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

UMEK

Serial No. 09/626,096

Filed: July 26, 2000

For: *Sequence Determination of
Nucleic Acids Using
Electronic Detection*

Art Unit: 1637

Examiner: Heather Calamita, Ph.D.

CERTIFICATE OF MAILING

I hereby certify that this correspondence, including listed enclosures, are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

Date: October 14, 2004

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Jessica Newlin
Jessica Newlin

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
AND
STATEMENT OF RELATEDNESS**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO/SB/8A. Copies of these references are enclosed.

Further, in satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and as required by M.P.E.P. § 2001.06(b), Applicant notes that the present application is related to the following pending patent applications:

1. U.S.S.N. 10/137,710, filed April 30, 2002; U.S.S.N. 10/336,225, filed January 2, 2003; and

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Serial No.: 09/626,096
Filed: July 26, 2000

2. U.S.S.N. 10/803,166, filed March 14, 2004.

Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

Pursuant to 37 C.F.R. §1.97(c), enclosed is a check in the amount of \$180.00 as set forth in 37 C.F.R. §1.17(p). While no further fee is believed to be due, if this belief is in error, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2319 (Our File No. 463037-00204; Our Docket No. A-68271-2)).

Please direct further questions in connection with this Application to the undersigned at (415) 781-1989.

Respectfully submitted,
DORSEY & WHITNEY LLP

Dated: 10/14/04

Customer No.: 32940

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Suite 3400

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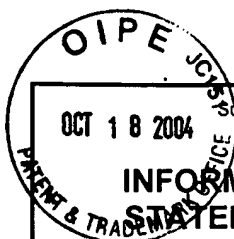
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By: [Signature]

Steve P. Lendaris, Reg. No. 53,202 for
Robin M. Silva, Reg. No. 38,304

Filed Under 37 C.F.R. § 1.34(a)

Attachments: Form SB/08/A-B, substitute for Form PTO-1449
192 cited references



Substitute for form 1449A/PTO (Modified)			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	09/626,096	
			Filing Date	July 26, 2000	
			First Named Inventor	UMEK, Robert M.	
			Art Unit	1637	
			Examiner Name	Calamita, Heather	
Sheet	1	of	10	Attorney Docket Number	A-68271-2/RMS/RMK/SPL (463037-00204)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	4,656,127	04-07-1987	Mundy	
	A2	4,683,195	07-28-1987	Mullis et al.	
	A3	4,683,202	07-28-1987	Mullis	
	A4	4,713,347	12-15-1987	Mitchell et al.	
	A5	4,851,331	07-25-1989	Vary et al.	
	A6	4,876,187	10-14-1989	Duck et al.	
	A7	4,988,617	01-29-1991	Landegren et al.	
	A8	5,011,769	04-30-1991	Duck et al.	
	A9	5,015,569	05-14-1991	Pontius	
	A10	5,130,238	07-14-1992	Malek et al.	
	A11	5,156,810	10-20-1992	Ribi	
	A12	5,171,853	12-15-1992	Thorp et al.	
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	A31	5,660,988	08-26-1997	Duck et al.	
	A32	5,670,322	09-23-1997	Eggers et al.	

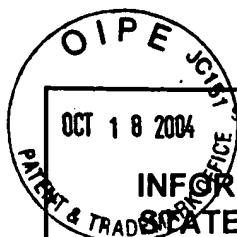
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Substitute for form 1449A/PTO (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
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Sheet	2	of	10	Attorney Docket Number	A-68271-2/RMS/RMK/SPL (463037-00204)

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	A33	5,695,940	12-09-1997	Drmanac et al.	
	A34	5,705,346	01-06-1998	Okamoto et al.	
	A35	5,710,028	01-20-1998	Eyal et al.	
	A36	5,727,548	03-17-1998	Hill et al.	
	A37	5,747,255	05-05-1998	Brenner	
	A38	5,767,259	06-16-1998	Albagli et al.	
	A39	5,780,224	07-14-1998	Collins et al.	
	A40	5,837,832	11-17-1998	Chee et al.	
	A41	5,846,708	12-08-1998	Hollis et al.	
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	A48	5,922,617	07-13-1999	Wang et al.	
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	A57	6,090,545	07-18-2000	Wohlstadter et al.	
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	B1	EP 0 142 301 A2	05-22-1985	Serono Diagnostics Limited		
	B2	EP 0 317 074 B1	05-24-1989	Orion-Yhtymäe Oy		

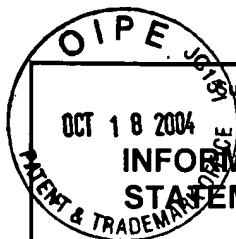
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Examiner Name	Calamita, Heather
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Sheet **3** of **10**

FOREIGN PATENT DOCUMENTS

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	B3	EP 0 371 437 B1	06-06-1990	Orion-Yhtymäe Oy		
	B4	EP 0 478 319 A1	04-01-1992	Tokyo Shibaura Electric Co.		
	B5	EP 0 668 502 A2	08-23-1995	Yissum Research Development		
	B6	WO 92/15712 A1	09-17-1992	Molecular Tool Inc.		
	B7	WO 93/10267 A1	05-27-1993	Igen, Inc.		
	B8	WO 93/25898 A1	12-23-1993	Medisense, Inc.		
	B9	WO 95/00666 A1	01-05-1995	The Research Foundation of State University of New York		
	B10	WO 95/00667 A1	01-05-1995	The Research Foundation of State University of New York		
	B11	WO 95/00669 A1	01-01-1995	Pharmacia Biotech AB		
	B12	WO 95/05480 A2/A3	02-23-1995	BioMedical Corp.		
	B13	WO 95/34816 A1	12-21-1995	Pharmacia Biosensor AB		
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	B15	WO 97/13075 A1	09-05-1997	Danfoss A/S		
	B16	WO 97/27473 A1	07-31-1997	Northwestern University		
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	B18	WO 98/12539 A1	03-26-1998	Meso Scale Technologies, LLC		
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	B20	WO 99/13109 A1	03-18-1999	Seq Ltd.		
	B21	WO 99/15893 A1	04-01-1999	Aventis Res. & Technologies GmbH & Co.		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS); title of the article (when appropriate); title of the item (book, magazine, journal, serial, symposium, catalog, etc.); date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	C1	ALEXANDER, V., "Design and Synthesis of Macrocyclic Ligands and Their Complexes of Lanthanides and Actinides," <i>Chem. Rev.</i> 95(2):273-342 (Mar. - Apr. 1995).	
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	C3	ARKIN, M., et al., "Rates of DNA-Mediated Electron Transfer Between Metallointercalators," <i>Science</i> 273(5274):475-480 (Jul. 1996).	
	C4	BAINS, W., et al., "A Novel Method for Nucleic Acid Sequence Determination," <i>J. Theor. Biol.</i> 135(3):303-307 (Dec. 1988).	
	C5	BARANY, F., "Genetic disease detection and DNA amplification using cloned thermostable ligase," <i>Proc. Natl. Acad. Sci. USA</i> 88(1):189-193 (Jan. 1991).	
	C6	BEATTIE, K., et al., "Advances in Genosensor Research," <i>Clin. Chem.</i> 41(5):700-706 (1995).	
	C7	BIGNOZZI, C., et al., "A simple poly(pyridine)ruthenium(II) photosensitizer: (2,2'-bipyridine)tetracyanoruthenate(II)," <i>J. Am. Chem. Soc.</i> 108(24):7872-7873 (Nov. 1986).	
	C8	BJERRUM, M., et al., "Electron transfer in ruthenium-modified proteins," <i>J. Bioenerg. Biomembr.</i> 27(3):295-302 (Jun. 1995).	
	C9	BLONDER, R., et al., "Application of redox enzymes for probing the antigen-antibody association at the monolayer interfaces: development of amperometric immunosensor electrodes," <i>Anal. Chem.</i> 68(18):3151-3157 (Sep. 1996).	
	C10	CARLSSON, C., et al., "Screening for genetic mutations," <i>Nature</i> 380(6571):207 (Mar. 1996).	
	C11	CARTER, M., et al., "Electrochemical investigations of the interaction of metal chelates with DNA. 3. Electrogenated chemiluminescent investigation of the interaction of tris(1,10-phenanthroline)ruthenium(II) with DNA," <i>Bioconjug. Chem.</i> 1(4):257-263 (Jul. - Aug. 1990).	
	C12	CARTER, P., et al., "Oxidation of DNA Haripins by Oxoruthenium(IV): Effects of Sterics and Secondary Structure," <i>Inorg. Chem.</i> 35(11):3348-3354 (May. 1996).	
	C13	CARUANA, D. J., et al., "Enzyme-amplified amperometric detection of hybridization and of a single base pair mutation in an 18-base oligonucleotide on a 7- μ m-diameter microelectrode," <i>J. Am. Chem. Soc.</i> 121(4):769-774 (Feb. 1999).	
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	C15	CHENG, J., et al., "Selectivity and sensitivity of self-assembled thioctic acid electrodes," <i>Anal. Chem.</i> 64(17):1998-1999 (Sep. 1992).	
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	C17	CLARKE, P.R., et al., "Physical and chemical aspects of ultrasonic disruption of cells," <i>J. Acoustics Soc. Am.</i> 50 649-653 (1970).	
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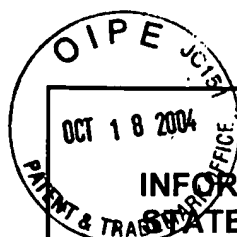
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	C20	DELAMARCHE, E., et al., "Immobilization of antibodies on a photoactive self-assembled monolayer on gold," <i>Langmuir</i> 12(8):1997-2006 (Apr. 1996).	
	C21	DOKTYCZ, M., et al., "Genosensors and Model Hybridization Studies," <i>Automation Technologies for Genome Characterization</i> , T. Beugelskijk (ed.), John Wiley & Sons: New York, NY, 1997, 10:205-225.	
	C22	DONG, S., "Self-assembled monolayers of thiols on gold electrodes for bioelectrochemistry and biosensors," <i>Bioelectrochem. Bioenerg.</i> 42(1):7-13 (1997).	
	C23	DONTHA, N., et al., "Generation of biotin/avidin/enzyme nanostructures with maskless photolithography," <i>Anal. Chem.</i> 69(14):2619-2625 (Jul. 1997).	
	C24	DORON, A., et al., "An Electroactive photoisomerizable monolayer-electrode: a command surface for the amperometric transduction of recorded optical signals," <i>Angew. Chem. Int. Ed. Engl.</i> 35(13&14):1535-1538 (Jul. 1996).	
	C25	DRMANAC, R., et al., "Sequencing of Megabase Plus DNA Hybridization: Theory of the Method," <i>Genomics</i> 4(2):114-128 (Feb. 1989).	
	C26	DUAN, C., et al., "Separation-free sandwich enzyme immunoassays using microporous gold electrodes and self-assembled monolayer/immobilized capture antibodies," <i>Anal. Chem.</i> 66(9):1369-1377 (May. 1994).	
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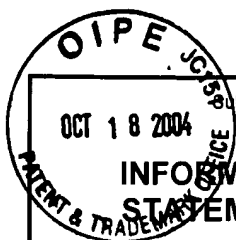
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			Examiner Name	Calamita, Heather	
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	C38	GOODWIN, D., et al., "Microwave Miniprep of Total Genomic DNA from Fungi, Plants, Protists and Animals for PCR," <i>BioTechniques</i> 15(3):437-441 (1993).	
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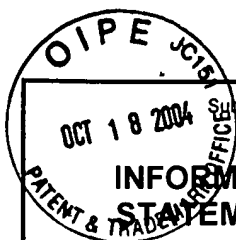
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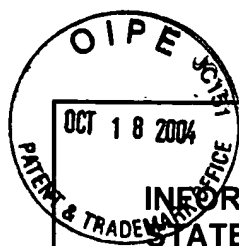
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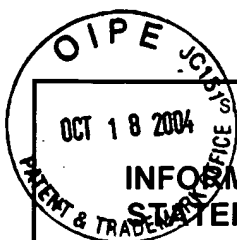
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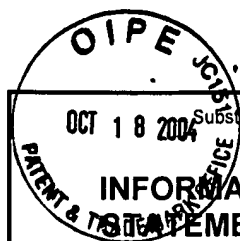
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			Application Number	09/626,096	
			Filing Date	July 26, 2000	
			First Named Inventor	UMEK, Robert M.	
			Art Unit	1637	
			Examiner Name	Calamita, Heather	
Sheet	10	of	10	Attorney Docket Number	A-68271-2/RMS/RMK/SPL (463037-00204)

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	C109	WELCH, T., et al., "Distribution of Metal Complexes Bound to DNA Determined by Normal Pulse Voltammetry," <i>J. Phys. Chem.</i> 100(32):13829-13836 (Aug. 1996).	
	C110	WELCH, T., et al., "Electron-Rich Oxoruthenium(IV) Cleavage Agents: A Zero-Order Rate Law for DNA Catalysis," <i>Inorg. Chem.</i> 36(21):4812-4821 (Oct. 1997).	
	C111	WILDING, P., et al., "PCR in a Silicon Microstructure," <i>Clin. Chem.</i> 40(9):1815-1818 (Sep. 1994).	
	C112	WOOD, J.C., et al., "Time-Frequency Transforms: A New Approach to First Heart Sound Frequency Dynamics," <i>IEEE Transact. Biomed. Eng.</i> 39(7):730-740 (1992).	
	C113	YGUERABIDE, J., et al., "Quantitative Fluorescence Method for Continuous Measurement of DNA Hybridization Kinetics Using a Fluorescent Intercalator," <i>Anal. Biochem.</i> 228(2):208-220 (Jul. 1995).	

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